



beyond frontiers

March 17, 2020

VIA ELECTRONIC FILING

Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, SW
Washington, D.C. 20554

**Re: SES Americom, Inc. and O3b Limited,
Notice of Oral *Ex Parte* Presentation, *Kuiper Systems LLC, Application
for Authority to Launch and Operate a Ka-band NGSO Satellite System,*
IBFS File No. SAT-LOA-20190704-00057; Call Sign S3051**

Dear Ms. Dortch:

On March 16 and 17, 2020, SES representatives spoke by telephone with Umair Javed from Commissioner Rosenworcel's Office, Bill Davenport from Commissioner Stark's Office, Erin McGrath from Commissioner O'Rielly's Office, and Will Adams from Commissioner Carr's Office to discuss the above-referenced application of Kuiper Systems LLC ("Kuiper") to launch and operate a Ka-band NGSO satellite system. SES was represented by Will Lewis, Kelsie Rutherford, and Karis Hastings, outside counsel to SES.

During the calls SES reiterated its position that granting Kuiper's request for waiver of Commission rules would harm other NGSO systems, GSO systems, and the public interest. The attached talking points formed the basis of the discussions.

Respectfully submitted,

/s/ Will Lewis

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Attachment

cc: Will Adams
Bill Davenport
Umair Javed
Erin McGrath

Granting the Amazon Kuiper Application Special Treatment Would Harm NGSO Systems, GSO Systems, and the Public Interest

- The record shows that Amazon’s application violates rules intended to provide a fair and competitive satellite services market and to preserve service continuity for users.
- The relief Amazon seeks – treatment as if its application had been timely submitted in the Ka-band NGSO processing round that closed almost three years before Amazon filed – would nullify the processing round framework, which is designed to:

establish a sharing environment among NGSO systems, to provide a measure of certainty in lieu of adopting an open-ended requirement to accommodate all future applicants. *NGSO Order*, 32 FCC Rcd at 7829, ¶ 61 (2017).

- This policy reflects the Commission’s considered judgment that processing rounds serve the public interest by promoting stability for authorized systems over the possibility of unlimited competitive entry.
- Amazon’s statement in its December 18, 2019 *ex parte* that a processing round rule waiver would “provide regulatory certainty, encourage further investment, and accelerate the delivery of high-quality broadband service to customers” is false in every respect.
 - A waiver would destroy any semblance of regulatory certainty for NGSO operators.
 - Authorized NGSO systems that relied on the processing round cut-off date to establish the sharing environment would instead be required to accommodate an additional system of 3,326 satellites that would generate a substantial increase in the number of in-line interference events.
 - Awarding Amazon equal status to legitimate processing round participants would also set an unsustainable precedent by opening the door for others to claim the same relief.
 - Because there is nothing unique about Amazon’s position, any subsequent party could demand a processing round waiver as well, resulting in the precise outcome the Commission stated it wanted to avoid – an “open-ended requirement” for authorized NGSO systems “to accommodate all future applicants.”
 - Rather than a stable interference environment, parties the Commission has authorized to deploy multibillion-dollar NGSO systems would face the prospect of ever-growing constraints on their operational flexibility and capacity to serve users.
 - Amazon’s January 27, 2020 *ex parte* reflects that it actually seeks regulatory certainty only for itself – but the precedent established by a waiver grant would create perpetual uncertainty for all NGSO systems.

- This uncertainty would leave hundreds of millions of dollars of currently invested capital stranded and unrecoverable by substantially chilling continued investment in authorized NGSO networks.
 - A reliable regulatory framework is essential to provide confidence to investors given the long lead times necessary to design, build, and launch satellite systems. Granting the relief Amazon requests would radically undermine the foundation on which NGSO systems have been relying, devaluing investments that have already been made and deterring ongoing funding of the industry.
- Amazon's entry on the preferential terms it seeks would impede, rather than promote, satellite-delivered broadband.
 - Allowing Amazon to increase interference to participants in the long-closed Ka-band NGSO processing round would disadvantage entities that have been on the forefront of meeting broadband requirements.
 - O3b has been enabling fixed broadband connectivity globally since it began operating in 2014, and its next generation mPOWER system scheduled to launch next year will exponentially increase capacity, with the capability to land 10 Gbps of uncontested capacity at a single terminal.
 - Other operators who timely filed before the November 2016 processing round cut-off are actively deploying spacecraft.
 - Turning the processing round system on its head to benefit Amazon would burden authorized systems and limit their capacity, delaying build-out and decreasing the options available to consumers.
- The waiver Amazon seeks is unjustified and unprecedented.
 - Amazon does not satisfy the waiver standard:
 - Amazon demonstrates no unique circumstances warranting departure from established regulatory procedures.
 - Amazon never shows that waiving the processing round rules is required to achieve the claimed public interest benefits of its proposed system.
 - Amazon never explains why it failed to comply with the November 2016 processing round cut-off date.
 - Grant of the requested waiver would directly conflict with the processing round rules' purpose – to establish a known, stable sharing environment for NGSO systems.

- The cases cited by Amazon in an attempt to bolster its waiver request bear no similarity to the facts here.
 - Commission decisions to authorize NGSO systems without initiating a processing round (including O3b's network) involved cases where the proposed operations did not conflict with existing spectrum rights.
 - For example, the Swarm decision cited by Amazon addressed a proposal to use a portion of the Little LEO spectrum where no party had been granted primary authority.
 - The Space Imaging decision allowed a satellite to be added to an existing authorization based on "the unique operating features of NGSO remote-sensing systems," including high discrimination antennas and limited transmission periods, which ensure "an extremely low probability of an interference event occurring." *Space Imaging, LLC*, 20 FCC Rcd at 11968.
 - In contrast, Amazon is seeking to introduce a new 3,326-satellite system in spectrum that is already in active use by multiple parties.
 - Amazon not only wants to avoid initiating a new processing round, it wants to be retroactively included in a long-closed processing round – the Commission has never before departed so radically from its NGSO rules.
- The so-called "sharing analysis" presented by Amazon is fundamentally flawed.
 - Amazon's entry on the terms it requests would make O3b and all the other legitimate participants in the November 2016 processing round worse off than they are now by requiring them to accommodate the late-filed Kuiper system.
 - The Amazon analysis uses an imaginary baseline in which all 11 applicants in the November 2016 processing round deploy their systems – a scenario that absolutely no one, including the Commission, expected would actually happen.
 - The withdrawal and revocation of Ka-band NGSO licenses do not create an interference allowance that other parties can exploit – and in any event, there is no reason that Amazon alone should be entitled to claim such an allowance to the exclusion of other participants in a future processing round.
 - Moreover, because waiving the rules for Amazon would set a precedent that would open the floodgates to future applicants seeking the same extreme relief, the assumption that legitimate NGSO processing round participants would face added interference only from the Kuiper satellites is also false.

- Amazon’s assertions that interference concerns can be resolved by good faith coordination are highly unrealistic.
 - Amazon assumes that “false positive” in-line events could be eliminated based on real-time information sharing between operators, claiming in its January 27 *ex parte* that receiving active link information from other operators can resolve many in-line events.
 - Amazon ignores the fact that operational details on matters such as moment-by-moment beam positioning, channel usage, and transmit earth station usage are commercially sensitive and will not be shared.
- Amazon’s assessment of its impact on O3b improperly omitted the worst-case latitude of 0 degrees based on Amazon’s views of O3b’s anticipated service area, invalidating its analysis of the interference effect on O3b.
- Amazon’s reference to an interference threshold of 25% Δ T/T is completely unjustified: because it did not timely file in the processing round, Amazon is not entitled to the benefit of the 6% Δ T/T threshold in Section 25.261, much less a much more generous threshold.
- The *NGSO Order* implemented a new approach to allow broadband NGSO satellites to share frequencies rather than being assigned separate band segments.
 - However, this has never been done in practice, and the public interest is best served by allowing timely applicants to work through this new process in good faith without the added complications created by a late entrant trying to game the system and bypass Commission rules.
- Amazon’s ability to meet EPFD limits to protect GSO networks is unproven.
 - Because Amazon submitted multiple ITU filings, the ITU’s evaluation of its EPFD compliance will not address the proposed system as a whole.
 - The backlog at the ITU suggests that evaluation of Amazon’s showings will not be completed for several years.
 - The Commission should require Amazon to share the files necessary to determine its EPFD compliance, including PFD masks, EIRP masks, and inter-satellite masks, with GSO operators and should suspend processing of the application until those files have been provided.
- Further consideration of the Amazon application should be deferred to a subsequent processing round.
 - The Commission has emphasized the need to allow authorized operators the opportunity to deploy and permit the Commission to assess the efficacy of its sharing mechanism. *NGSO Order*, 32 FCC Rcd at 7825, ¶ 49 (2017).

- Amazon's complaints of delays resulting from such steps are unpersuasive because the problem is wholly of its own making, resulting from its failure to timely file in the 2016 processing round.
- The delays will allow Amazon to complete its system design and provide required information regarding orbital debris mitigation.
- A new processing round will allow the Commission to fairly consider all proposals for new or expanded NGSO systems.